

*Papers read before the Society from February 1876 to
February 1877.*

1876.

- Mar. 10. The Stereo-Micrometer. Prof. Zenger.
Occultation of the *Pleiades* observed at Madras on
Jan. 7, 1876. Mr. N. R. Pogson.
Abstract of Prof. Christian Mayer's paper on the
Observations of Binary Stars discovered at the
Mannheim Observatory. Mr. S. M. Drach.
On the proper Motions of the two components of the
Binary system *α Centauri*. Mr. E. J. Stone.
On a supposed Variability of the Proper Motion of
B.A.C. 793. Mr. E. J. Stone.
Micrometer-measures of *Saturn's* satellites made at
the Royal Observatory, Greenwich, in the year
1875. The Astronomer-Royal.
Comparisons of recent and former Observations of
B.A.C. 793, and remarks on the alleged Variability
of its proper Motion. Mr. Dunkin.
Note on a Starlit Transit Eye-piece. Dr. Royston
Pigott.
Observations of the November Meteors made at the
Royal Observatory, Greenwich, in 1875. The
Astronomer-Royal.
Preliminary Note on Photographing the least re-
fracted portion of the Solar Spectrum. Capt. W.
de W. Abney.
Reference Catalogue of Astronomical papers and
Researches. Mr. Knobel.
12. On the most probable Result which can be derived
from a number of direct Determinations with
assigned Weights. Mr. E. J. Stone.
A list of Stars beyond the ordinary limits of Distance,
inserted as double in Sir John Herschel's General
Catalogue of Double Stars. M. Flammarion.
Radiant Points of Shooting Stars. Mr. W. F.
Denning.
Near approach of 47 *Geminorum*. Rev. S. J. John-
son.
An Instrument for determining Spherical Triangles
by Mechanical action. Mr. F. C. Penrose.
Note on the two exterior Satellites of *Uranus*. Rev.
T. W. Webb.

- May 12. On our Sidereal System, and the Direction and Distance to its Centre. Mr. J. Ennis.
 Note on the Conjunction of *Venus* and λ *Geminorum* on August 17-18, 1876. Mr. Dunkin.
 On recent American determinations of Geographical positions in the West Indies and Central America. Major H. S. Palmer.
 A Catalogue of red double Stars. Mr. S. W. Burnham.
 Observations of Minor Planets made at the Observatory of Marseilles. M. E. Stephan.
 Note on the Discovery and Observations of Minor Planets (¹⁶⁰) to (¹⁶³). Mr. Dunkin.
 Note on Coggia's Comet (III. 1874). Mr. J. Dreyer.
 On the relative Power of Achromatic and Reflecting Telescopes. Dr. T. R. Robinson.
 Note on the Satellites of *Uranus*. Mr. E. Neison.
 Note on Dr. Royston Pigott's Starlit Transit Eyepiece. Capt. W. Noble.
 Visibility of *Oberon* and *Titania*. Mr. Rogerson.
 On Lohrmann's and Schmidt's Lunar Maps, and Note on a new red Star. Mr. J. Birmingham.
 Spectroscopic results for the Motions of Stars in the line of sight made at the Royal Observatory, Greenwich. The Astronomer-Royal.
 Note on the Displacement of Lines in the Spectra of Stars. Mr. W. H. M. Christie.
 On Precession. Dr. Berg.
 On the Transit across the Sun's disk of the second, or great Comet of 1819. Mr. J. R. Hind.
 June 9. On the Atmosphere of *Venus*. Mr. E. Neison.
 Remarks in connection with his five volumes of Solar drawings. Rev. F. Howlett.
 On the Determination of the Distances of a Comet from the Earth from three Observations. Dr. Berg.
 Visibility of *Mercury* and *Venus* in sunshine. Mr. W. F. Denning.
 Elements of Minor Planets (¹⁶¹), (¹⁶²) and (¹⁶³). Mr. Dunkin.
 On a hitherto unnoticed apparent inequality in the Longitude of the Moon. Prof. S. Newcomb.
 Photometric experiments upon the Light of *Venus*. Mr. J. I. Plummer.
 Observations of *Venus*. Capt. W. Noble.
 On the proper Motion of the bright Spots on *Jupiter*. Mr. J. Brett.
 Note on a method of obtaining Equatoreal Motion on an Altazimuth Stand. Lord Lindsay.
 Note on a Double Image Spectroscope. Lord Lindsay.

- Nov. 10. Measurement of the direct Effects of Sun-spots on Terrestrial Climates. Prof. Langley.
 Observations of Planets with the Transit Circle at Dublin (Dunsink). Dr. R. Copeland.
 Observations of Lunar Eclipse of 1876, September 3, made at Cadiz. Señor A. T. Arcimis.
 A method of deducing the Formula for correcting the Computed Time of an observed Occultation for errors in the Elements adopted. Mr. W. H. Finlay.
 Description of an Improved Altazimuth Stand for Reflecting Telescopes, with a new form of Binocular Eye-piece. Mr. W. H. Thornthwaite.
 Spectroscopic observations of the Motions of Stars and of *Venus* in the line of sight, and of the rotation of the Sun and of *Jupiter*, made at the Royal Observatory, Greenwich. The Astronomer-Royal.
 On the effect of wear in the Micrometer Screws of the Greenwich Transit Circle. Mr. W. H. M. Christie.
 Observations of the Solar Eclipse of 1876, Sept. 17. Mr. J. Tebbutt.
 An endeavour to simplify the method of making the correction for the Spheroidal figure of the Earth in Lunar observations, and particularly with reference to its effects upon the Lunar Distance. Mr. F. C. Penrose.
- Dec. 8. A List of Binary and other interesting Double Stars. Messrs. J. M. Wilson and J. Gledhill.
 On some phenomena of the Internal Contacts common to the Transits of *Venus*, observed in 1769 and 1874, and some remarks thereon. Mr. E. J. Stone.
 On some diffraction Experiments of M. Ch. André, with reference to Astronomical Instruments, and the general theory of this Diffraction. Rev. S. J. Perry.
 On the Phenomena exhibited by a Planet in its transit across the Solar disk, from observations by M. Ch. André. Rev. S. J. Perry.
 Note on the relative Space-penetrating power of the Pulkowa 15-inch Refractor, and Mr. Lassell's 4-foot Reflector. M. O. Struve.
 On an Oversight in the "*Mécanique Céleste*," and on the Internal Densities of the Planets. Mr. G. H. Darwin.
 On the Error of the tabular place of *Venus* on December 8, 1874. Col. Tennant.
 Note on the Gradation of Light on the disk of *Venus*. Mr. W. H. M. Christie.
 On the Position of the point of maximum brightness on *Venus*. Mr. E. Neison.

Note on Professor Langley's paper on the Direct Effects of Sun-spots on Terrestrial Climates. Mr. W. Mattieu Williams.

1877.

Jan. 12.

On the Orbit of *a Centauri*. Mr. A. Marth.

On the Conjunction of *Venus* and λ *Geminorum*. Mr. J. I. Plummer.

Theory of the Horizontal Photoheliograph, including its application to the determination of the Solar Parallax by means of Transits of *Venus*. Prof. Harkness.

On O. M. Mitchell's Observations at Cincinnati. Prof. Cleveland Abbe.

Observations of Shooting Stars, April to December, 1876. Mr. W. F. Denning.

Note on an Improved Mode of viewing the Sun. Dr. W. Erck.

Observations of Occultations of Stars by the Moon, and phenomena of *Jupiter's* satellites, made at the Royal Observatory, Greenwich, in the year 1876. The Astronomer-Royal.

Micrometrical Measures of Double Stars. Mr. G. Knott.

Ephemeris for determining the positions of the satellites of *Uranus*. Mr. A. Marth.

On the Orbit of *a Centauri*. Mr. J. R. Hind.

The Specular Reflection hypothesis, and its bearing on the Transits of *Venus*. Mr. J. Brett.